## **REMARKS**

Claims 26-35, 37, 40-46 and 93 are pending in this application.

Claims 26-35, 37, 40-46 and 93 are rejected.

## Rejection Under 35 U.S.C. § 112 of Claims 41-44

The Examiner rejects **claims 41-44** under 35 U.S.C. § 112 arguing they are indefinite for failing to particularly point out and distinctly claim the subject matter.

We have amended the claims without narrowing them, to eliminate the ambiguity that the Examiner identifies.

Applicants respectfully submit that the rejection of claims 41-44 under § 112 should be withdrawn.

## Rejection Under 35 U.S.C. § 103(a) of Claims 25-46 and 93

The Examiner rejects **claims 25-46 and 93** under 35 U.S.C. § 103(a) as unpatentable over Landvater (U.S. 6,609,101) in view of the RDG ad by a subsidiary of Display Unlimited (www.displayunlimited.com).

## Claim 93

Claim 93 is reproduced below.

The Examiner's form of argument regarding this claim is first to assert that every limitation of the claim is met by Landvater (OA at 3-5), then to contradict herself by admitting at least some of what Landvater lacks. (OA at 5) Reading the Examiner's remarks at 3-5, one might miss how the brief admission of what is lacking from Landvater undermines the detailed assertion that virtually everything appears there. The reproduction below uses double strike through to indicate what the Examiner acknowledges is missing from Landvater and single strike through to indicate what the Examiner mistakenly argues can be found.

A computer implemented method of simulating demand for and stocking of standard presentation fixture types used in retail outlets having differing floor plans, including:

for use across selling locations, designating a plurality of display fixture setups, the display fixture setups including a display fixture type and a capacity for holding items and naming instances of the display fixture setups to differentiate among the instances at a particular selling location;

for the selling locations, recording in data structures the named instances of display fixture setups that are present at the selling locations;

for items to be displayed using the named instances, recording presentation dates during which the items are to be displayed in the named instances and presentation quantities;

for use across selling locations, recording in data structures time elements that are used collectively to represent the lead time for an order or other action to lead to display of the in the named instances at the selling locations;

for the items at the selling locations, selecting a plurality of the time elements to represent the lead time;

simulating sales of the items at the locations during a predetermined selling period and the orders that would need to be placed to stock the display fixture setups and to satisfy the simulated sales, using the selected time elements for the lead time and the presentation dates and the presentation quantities;

reporting results of the simulating.

Then, does the RDG ad lead one of ordinary skill in the art to improve Landvater as claimed, without using this claim as a roadmap or blueprint? In the following section, we explain why the RDG ad cannot be used as a reference under § 103(a), and why it is unusable as evidence of the level of ordinary skill in the art. We will conclude that it deserves no evidentiary weight at all.

# The RDG ad Does not Qualify as a 102(b) Reference that Can be Combined with Landvater Under § 103(a)

The RDG ad does not qualify as a reference that can be applied in a combination under § 103(a) because it does not disclose technology and does not provide an enabling disclosure of any claimed feature.

The RDG ad does not have any of the attributes of technology, patentable or not. For instance, it does not identify a practical application of a method or computerized device related to the company's purported consulting talent. It does not teach any element of claim 93 and does not teach any of the elements that are stricken through as missing from Landvater.

The RDG ad does not satisfy the enablement requirement for a reference. It is black letter law that "[r]eferences relied upon to support a rejection under 35 U.S.C. 103 must provide an enabling disclosure, i.e., they must place the claimed invention in the possession of the public ..." *In re Payne*, 606 F.2d 303, 314-15, 203 USPQ 245 (CCPA

1979) *citing, In re Brown*, 329 F.2d 1006, 141 USPQ 245 (CCPA 1964) (rejection reversed); *see, In re Sheppard*, 339 F.2d 238, 52 C.C.P.A. 859, 1964 CCPA LEXIS 263, 1965 Dec. Comm'r Pat. 107, 144 U.S.P.Q. (BNA) 42 (C.C.P.A. 1964) (rejection reversed); *In re LeGrice*, 301 F.2d 929, 49 C.C.P.A. 1124, 1962 CCPA LEXIS 278, 1962 Dec. Comm'r Pat. 707, 133 U.S.P.Q. (BNA) 365 (C.C.P.A. 1962) (rejection reversed); 1-3 Chisum on Patents § 3.04 [1][b][v] to [1][c].

The Examiner concedes, "Thus, Display Unlimited was not relied on to teach designing an inventory program." Office Action, p. 11 (mailed April 27, 2007).

Accordingly, the RDG ad is not a reference for § 103(a) purpose. It might be evidence related to one of the *Graham v. John Deere* factors, but it surely is not a reference that can be combined with Landvater.

## The RDG ad is Irrelevant to the Graham Analysis of Non-Obviousness and not Usable as Evidence

Having established that the RDG ad is not a reference that supplies an enabling disclosure any claimed element, in this section we demonstrate that the RDG ad is not evidence of anything, that it is irrelevant and may not legally be considered for any purpose. The level of ordinary skill in the art is an issue that the Examiner has not addressed. We direct the Examiner's attention to *Ex parte Jud*, Appeal No. 2006-1061 (Jan. 30, 2007) (expanded panel, informational opinion) (copy attached), for the legal framework in which we analyze the lack of relevance of the RDG ad. In *Ex parte Jud*, at 2-3, the Board reiterated the *Graham* factors for nonobviousness analysis, which include the level of ordinary skill in the art.

The Supreme Court has elaborated that:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the **level of ordinary skill in the pertinent art** resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. *Graham v. John Deere Co.*, 383 U.S. 1, 17-1 8 (1966). These four determinations have come to be known as the Graham factors.

Following this analysis, Landvater is the prior art and the claim with strike throughs ascertains differences between the prior art and claim 93. That leaves the level of ordinary skill in the art as an issue to which the RDG ad might be relevant.

The Board discussed the value that if finds in three categories of evidence of the level of ordinary skill: the application itself, publications and testimony. The Board looked to the applicants' disclosure for its level of detail. Regarding the application, at 4:

The disclosure is particularly helpful when it describes the background to the invention and the applicant's contribution to the art. Care must be exercised, however, to ensure that the applicant's contribution is not itself mistaken as an admission regarding the pre-existing knowledge and skill in the art.

The Board goes on to comment that what the applicants disclosed in order to enable their new technology helps to determine the level of ordinary skill in the art. *Id.* at 4-5. An enabling disclosure gives a sense of how much teaching it takes for one of ordinary skill in the art to understand and practice the new technology, establishing at least a floor on the level of skill in the art. Accordingly, a short disclosure suggests an easily understood improvement; a long disclosure suggests a new development that must be carefully explained to be understood by one of ordinary skill.

The second category is documentary evidence or references, at 5.

References are typically indirect in their teachings regarding the skill level in the art. Moreover, the teachings may sometimes be incomplete since explaining the skill level in the art is rarely the intended purpose of a reference. References are generally entitled to great weight, however, because they are almost always prepared without regard to their use as evidence in the particular examination in which they are used.

Judges and trial lawyers similarly emphasize the value of documents prepared for reasons unrelated to the issues being decided.

The least helpful category of evidence is testimony about the education level and work experience of an artisan. *Id.* at 5-6.

In this case, the Applicants' disclosure is 36 pages plus figures. The level of technical detail disclosed includes formulas for calculating stockouts, order quantities, allocation quantities and the like. This level of detail not found in the RDG ad.

The primary reference, Landvater includes 32 published columns plus 25 pages of figures. As an enabling disclosure, it presents calculations in a level of detail similar to our application, *albeit* a much different set of calculations than Applicants disclose.

The level of ordinary skill in the art, from the application and primary reference, is such that detailed descriptions of calculations appear to be warranted, in order to convey a new approach to inventory management software.

The RDG ad is irrelevant to determining the level of ordinary skill in the art and cannot be given any evidentiary weight. It does not provide even an indirect teaching regarding the level of ordinary skill in the art (*In re Jud*), as it admittedly is not offered for any teaching related to designing an inventory program. (OA at 11) It cannot be reconciled with the consistent indications in this application and in the primary reference that a detailed teaching is appropriate to the applicable level of ordinary skill.

While we have never before approached removing a publication as a reference in this way, we expect that all judges would agree that the RDG ad is irrelevant and to be excluded from consideration or given no weight as evidence on the *Graham* factors.

## The Standard for a Single Reference § 103(a) Rejection is Rigorous

For a Section 103 rejection based on a single reference, the Examiner needs to provide evidence or detailed rationale, including discussion of the level of skill in the art, in support of extending the reference to include the claimed features that admittedly are not part of the reference. It is fundamental, as indicated in MPEP § 2143.01, that the Examiner satisfy the Administrative Procedure Act (APA) with the rationale for modifying Landvater. In the case *In re Lee*, the Federal Circuit explained that the APA requires evidentiary quality support of an Examiner's factual basis (as opposed to the Examiner's opinion) for an obviousness rejection:

As applied to the determination of patentability vel non when the issue is obviousness, "it is fundamental that rejections under 35 U.S.C. § 103 must be based on evidence comprehended by the language of that section." In re-Grasselli, 713 F.2d 731, 739, 218 U.S.P.Q. (BNA) 769, 775 (Fed. Cir. 1983). ... "The factual inquiry whether to combine references must be thorough and searching." Id. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. [citation omitted] The need for specificity pervades this authority. See. e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 U.S.P.Q.2D (BNA) 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"): In re Rouffet, 149 F.3d 1350, 1359, 47 U.S.P.Q.2D (BNA) 1453, 1459 (Fed. Cir. 1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons

one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); *In re Fritch*, 972 F.2d 1260, 1265, 23U.S.P.Q.2D (BNA) 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references"). ... In its decision on Lee's patent application, the Board rejected the need for "any specific hint or suggestion in a particular reference" to support the combination of the Nortrup and Thunderchopper references. Omission of a relevant factor required by precedent is both legal error and arbitrary agency action.

*In re Lee*, 277 F.3d 1338, 1343-44, 61 U.S.P.Q.2D (BNA) 1430, 1433-34 (Fed. Cir. 2002).

The outcome of cases decided even before *In re Lee* makes it clear that real evidence is required to support modifying a single reference as a basis for obviousness rejection. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1369-70 (Fed. Cir. 2000) (rev'd finding of obviousness, no explicit or implicit showing, as "Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference."); *Kolmes v. World Fibers Corp.*, 107 F.3d 1534, 1541 (Fed. Cir. 1997) (aff'd patent not invalid, as no basis for modifying the '989 patent reference with regard to non-metallic fibers).

Landvater Does not Support a Single Reference Rejection under § 103(a)

The table below illustrates Landvater's teaching and examples of how to
calculate safety stock requirements, in order to assure an attractive presentation:

|       | Facing | Min Rows | Req'd | Max Rows | Extras | Backroom |
|-------|--------|----------|-------|----------|--------|----------|
| Shelf | 3      | 1        | 3     | 6        | 15     | 0        |
| Floor | 1      | 1        | 1     | 1        | 0      | 1        |

The first example is from column 14, lines 45-51, under the heading "Safety Stock". Landvater does not identify a particular product in this example, but indicates three facings and a minimum of one row deep for an attractive display, requiring three units of product. The maximum number of rows deep is 6, permitting storage of 18 units. (3 required +15 extras = 18 stored) "No additional units should be kept as safety stock in addition to the quantity on the shelf." The other example is from column 14, lines 51-58.

One mattress is kept on the display floor and another is in the back room, available for purchase without selling the floor model.

It is clear from col. 14, line 59 - col. 15, line 16 that Landvater applies the same calculation to the "shelf configuration" arrays represented above, regardless of whether they capture a shelf with multiple facings and rows or a floor model with a single facing. The shelf array depicted above is what one of ordinary skill in the art would understand from Landvater's teachings.

Landvater's shelf configuration array does not anticipate or render obvious the display fixture data structures disclosed or claimed. The Examiner agrees that the claimed structures are not anticipated. Applicants' figures depict various data structures, including a list of display fixture setups, a list of named display fixture setups at particular selling locations, and assignments of products to particular named display fixture setups. One simplified illustration of data structures that could be used to implement claim 93, in a relational table format, might be:

| Display fixture type | Capacity |  |
|----------------------|----------|--|
|                      |          |  |
|                      |          |  |

| Selling Location | Display Fixture Type | Named Instance |  |
|------------------|----------------------|----------------|--|
|                  |                      |                |  |
|                  |                      |                |  |

| Selling Location | Item | Display Fixture Type - Named Instance |
|------------------|------|---------------------------------------|
|                  |      |                                       |
|                  |      |                                       |

This is a much different approach to presentation displays than Landvater's shelf configuration arrays. It does not take any skill in programming to recognize the difference between a shelf configuration array and multiple interrelated tables.

The sophisticated approach of this application is particularly helpful to retail chains, such as The Body Shop, that use the same fixtures in outlets that have a variety of floor plans. On page 10 of the application, we explained:

One way of associating presentation quantities with a good at a selling location is to create a unique name for a particular fixture, promotional display point or other mode of presentation. A set of named fixtures are then associated with each selling location. When the layout of a selling location changes, different named fixture can be associated with the location. Fixture setups are associated with the fixtures for particular goods and periods of time. The named fixture setups can be assigned specific quantities (capacities) of goods per fixture setup or fixtures can be assigned different good quantities per fixture for different periods of time. The end result is that the system takes into account the capacities of named fixtures and the number of named fixtures at each selling location when it calculates presentation quantities. For good selling location pairs, one or more of the available setups at the selling location can be allocated to the good. In this approach, the system can calculate the presentation quantity from assignment of goods to particular setups in particular fixtures.

This disclosure teaches something very useful to retail chains. *Applic*. at 3, lines 7-8. The Examiner undoubtedly has visited malls where familiar stores appear in a variety of layouts – think of how may sizes and shapes of Starbucks coffee shops there are. Named display fixtures used in different locations for different floor plans is a feature that Landvater does not suggest or have any way to implement in shelf configuration arrays.

Landvater has a different function, works in a different way and produces a different result. Our function accommodates different floor plans in a retail chain; Landvater is limited to inventory for a particular configuration of facings, rows behind facings and backroom stock, without generalization across stores. Our way abstracts the display strategy by using multiple data structures that are interrelated; Landvater uses a shelf configuration array that has a physical analog in a single store. Our result is that a retailing plan can be applied to multiple locations that have different floor plans; Landvater works on one set of shelf configurations in one location at time.

The wide difference between Landvater and our disclosure and/or claims cannot be bridged by stressing the word "configuration" in the noun phrase "shelf configuration" that appears in col. 14. (OA at 11) The phrase "shelf configuration" does not render obvious the abstraction layer that we teach and claim.

Nor does Landvater's reference to planograms (col. 14, lines 35-36) render obvious our abstraction layer. Planograms are sheets of paper sheets used to depict shelves. Mere mention of using paper for writing down how many facings and rows of facings fit on a shelf does not teach anything about extending Landvater's software design. It is not a detailed, enabling disclosure, in the sense that Landvater has taught a software system.

As a separate ground for allowing claim 93 over Landvater, we point to the limitations on how lead times are broken into time elements and composed in the software as collections of time elements. These are the recording and selecting elements, for use across selling locations and for items at the selling locations, respectively. The Examiner argues that Landvater reads on the limitations

for use across selling locations, recording in data structures time elements that are used collectively to represent the lead time for an order or other action to lead to display of the in the named instances at the selling locations;

for the items at the selling locations, selecting a plurality of the time elements to represent the lead time;

She cites col. 8, lines 25-40; col. 9, lines 15-25 and 55-col. 10, line 20; col. 14, lines 25-45 and 65-col.15 line 6 and 17-25; and col. 17, line 60-col. 18, line 2. The parenthetical reasoning from all of these passages is, "wherein time information associated with the display is stored in the system database, as well as time-phased forecasts and actions, and lead times". The reasoning does not read on the claim limitations and neither do the passages cited.

The Examiner's rationale that time information is stored in a system database does not read on the claim limitations. Time elements are illustrated in the application as including processing time at particular facilities and transit time between particular facilities. The claim calls for recording these time element in a data structure, from which lead time can be constructed for the items at the selling locations. The Examiner's general reference to "time information" or "lead time" does not read on the claim limitations. Nor do the cited passages.

The passages cited are off point. In the cited passage from col. 8, "lead time (or transit time)" is a single phrase, not a collection of time elements, as claimed. In col. 9, the words "lead time (or transit time)" are repeated without elaboration. In cols. 9-10, a

manufacturing planning system, irrelevant to these claims, is described. In col. 14, there is no mention of lead times. In cols. 14-15, changes to shelf configuration arrays are discussed, but lead times are not mentioned. Col. 15, discusses how to deal with shelf changes, without mentioning lead times. Cols. 17-18 comes closer than the others. "The ship date is ... is the receipt date less the lead time to pick, transport, and receive the shipment." But this expresses what happens on the loading dock, not an element of software design.

None of the Examiner's rationale, the repeated phrase "lead time (or transit time)" or Landvater's description of what happens on the loading dock reads on the recording and selecting elements of claim 93.

For all of theses reasons, claim 93 should be allowable over Landvater, which is the single reference cited that has any evidentiary weight.

#### Claim 26

#### Claim 26 includes the limitations:

The method of claim 93, further including, for the items to be displayed, designating whether or not a quantity of the item at the selling location should be allowed to fall below the presentation quantity between deliveries.

These limitations are not found in Landvater in view of the RDG ad. This is not a choice that Landvater's user makes.

Landvater cols. 14-15 teach describing a presentation quantity and then letting the system calculate an addition to safety stock that takes into account presentation quantity. This claim step requires an additional measure of selecting yes or no as to whether the quantity on hand at a location should be allowed to fall below the presentation quantity between deliveries. For instance, if deliveries are two week apart, is it considered "okay" for the quantity on hand to be less than desired for an attractive display on the 13<sup>th</sup> day, just before restocking, or should the safety stock be cushioned with a few more units, thereby increasing the cost of inventory on hand in exchange for decreasing the probability that the quantity on hand will drop below the PQ between deliveries. This is a patentably significant subtlety related to selling out of the PQ that Landvater does not teach.

Therefore, claim 26 should be allowable over Landvater in view of the RDG ad.

## Claims 27-29 and 31-34

#### Claims 27-29 and 31-34 include the limitations:

wherein the time elements include delivery of the item from a stocking location

wherein the time elements include preparing the delivered item for sale

wherein the time elements include time required to collect data, review action recommendations, process data, pick goods at a stocking location, and ship the item to the selling location

wherein the time elements include time for distributing the good from one or more first level stocking locations to a plurality of second level stocking locations

wherein the time elements include time for distributing the item from one or more first level stocking locations to a plurality of second level stocking locations

wherein the time elements include time for distributing the item from a supplier through one or more stocking locations to a plurality of selling locations

wherein the time elements include time for distributing the item from a supplier through one or more stocking locations to a plurality of selling locations

These limitations are not found in Landvater in view of the RDG ad, because "time elements" as used in these claims are not found in Landvater. The Examiner urges that Landvater mentions these factors as important to take into account when calculating lead time. However, that does not read on the claim limitations that call for specific "time element" structures that are manipulated as part of the claimed method.

The Examiner's rejoinder [#4] (OA at 13) misses the point. Landvater does mention these considerations (except collecting data and reviewing action recommendations) as part of what a planner should be take into account when specifying a lead time or transit time. However, the approach of this method, namely creating time element building blocks and combining selected building blocks to construct an overall lead time does not appear in any of the passages that the Examiner cites.

The passages cited by the Examiner do not teach use of time element building blocks combined by selecting building blocks into an overall lead time: not in column 3, lines 10-30 (specialized safety time logic for promotions); column 4, lines 54-66 (using

sales data when forecasting); column 7, lines 1-25 (multiple customer-supplier relationships in replenishment network); column 8, lines 25-45 (replenishment includes delivery dates and transit time); column 9, lines 1-25 (calculating net deliveries to second level of supply chain) or 55-67 (manufacturing planning based on anticipated customer needs); column 10 (weekly or monthly projections of sales in retail stores for 20/80 percent of items, reduces number of forecast rows or records); column 11, lines 15-35 (override logic to force weekly planning instead of monthly planning); column 14, line 60-column 15, line 6 (shelf configuration arrays to take into account changes in shelf configuration); column 16, lines 35-65 (firm vs not firm planned replenishment handling); or in figures 8 (daily granularity for most immediate weeks) or 9 (whether to use weekly or monthly planning). None of these passages teach quite what we claim and no logic is provided by the Examiner for extending what Landvater teaches to read on what we claim.

Therefore, claims 27-29 and 31-34 should be allowable over Landvater in view of the RDG ad.

## Claims 30 and 35

Claims 30 and 35 should be allowable over Landvater in view of the RDG ad for at least the same reasons as the claim from which it depends.

#### Claim 37

#### Claim 37 includes the limitations:

The method of claim 93, wherein the action includes allocating delivery of the item after ordering from a supplier.

This detail of retail merchandising is not addressed by Landvater in any of the passages cited: figure 1; 6:45-67; 8:25-45 (replenishment includes delivery dates and transit time); 9:1-25 (calculating net deliveries to second level of supply chain) & 55-67 (manufacturing planning based on anticipated customer needs); 13:30-45 & 59-67; or 14:25-65. Saying that these passages "all ... talk about acquiring product from a supplier after the product has been ordered" is not responsive to the claim language.

The language used in the claim is clear enough to be given patentable weight. This application refers frequently to post-order placement allocation ("post allocation") of goods from a supplier. For instance, post allocation is defined on page 4 and further applied on page 6. Formulas that may be applied to allocation are presented and

explained on pp. 19-20. One of skill in the art after reading the application and the exchanges during prosecution would have no difficulty understanding the post allocation limitation of this dependent claim.

None of the Landvater passages cited recognize or apply the concept of post allocation of goods already ordered.

Teaching away from post allocation, Landvater takes a rigidly supply chain view of ordering and delivering exactly the projected need. For instance, at 9:3-5, "The sum of the projected replenishment shipments to retail stores 23 is used as input to replenishment system 200 at suppliers 24. The sum of the projected replenishment shipments to retail stores 23 represents what will be shipped out of suppliers 24." Instead of anticipating post-order allocation, Landvater teaches away from what we claim.

The Examiner previously argued that "allocating delivery of the good after ordering from a supplier' [is different from] post-order placement allocation per se." (FOA at 12) We asked in our last response, what is the difference, other than the order of words in the phrase? If the Examiner were reacasting post-order placement allocation in words beginning with a gerund, what words would she use? The Examiner ignored us in FOA at 14 [#5]. She made no effort to read either the passages cited or her arguments on the claim words "allocating delivery of the good after ordering from a supplier", even after quoting the limitation.

Therefore, claim 37 should be allowable over Landvater in view of the RDG ad. Claim 40

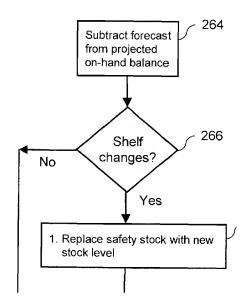
#### **Claim 40** includes the limitations:

wherein the simulating includes adding the presentation quantities and the projected demand requirements for the item at the selling locations.

These limitations are not found in Landvater in view of the RDG ad.

The more that we study Landvater, the less sense it makes and the less support it provides for the Examiner's position. Landvater discusses shelf configurations and safety stock in cols. 14-15. He teaches simulating sales in discrete periods, allowing sale of fractional units (FIG. 22, ref 516), which is at odds with conventional discrete event simulation because fractional unit sales do not represent a real world event --people do not buy one-third of a dress or can of tomatoes! Landvater's so-called safety

stock level is reset in each simulation period that the shelf configuration changes. FIG. 15, step 266 (reproduced to the right). Recall that Landvater's unconventional use of "safety stock" to refer to the quantity required for an attractive display. Col. 3, lines 45-45; col. 14, line 60. The trigger for generating an order in a simulation cycle is when the fractional unit sales rate causes the on hand inventory to drop below the safety stock level. FIG. 13b, step 226. Then, a quantity like an economical order quantity is scheduled for delivery in time to prevent the inventory on hand from dropping below the safety stock level. FIG. 13b, step 227.



When one reads Landvater carefully, it is clear that Landvater does not use "an average presentation quantity" for the location during the planning cycle. Landvater's approach of using presentation quantity as the so-called safety stock cannot be read on this claim and is highly suspect. Landvater's teaching ignores the traditional concepts of normally distributed demand variance and service level and places the retailer at risk of fluctuations in demand, relying on sales out of the "attractive display" which he calls a "safety stock" to meet demand variance. This is particularly risky for high volume items with small presentation quantities.

As applied to claim 40, the presentation quantities and the projected demand requirements are not added together by Landvater. In our teaching, at page 12 of the application:

ModelStock(selling location, good) = DemandProxy(selling location, good) + PresentationQuantity(selling location, good, time) + SDM(selling location, good, time)

. . .

PresentationQuantity(selling location, good, time) is determined using either of the approaches described below.

DemandProxy(selling location, good) may be a measure of projected demand requirement for the coverage cycle. It **typically includes projected selling and safety stock forecasts.** For the present

invention, virtually any *DemandProxy* can be modified to reflect the real world consideration of presentation quantities; the manner in which the DemandProxy is calculated is not a part of the present invention.

SDM(selling location, good, time) is a shorthand for "special display minimum." It is a user specified value that can be directly assigned. For instance, a SDM may be useful when using the first equation above and desiring to protect a special display quantity from being sold during the coverage cycle (such as an item in a display window that you are not willing to sell during the display period). It can also be used as an additional safety factor to cushion model stocks against problems of poor data integrity.

Our *ModelStock* sums projected demand, safety stock (as the term is normally understood, not as Landvater uses it), *PresentationQuantity* and any special display minimum. What Landvater does is subtract projected demand from inventory on hand and use the presentation quantity as a threshold for triggering a new delivery. This is highly suspect and probably does not work very well, for the reasons given above.

Claim 40 should be allowable over Landvater in view of the RDG ad because Landvater's use of a presentation quantity as a so-called "safety stock" threshold for generating an order does not read on this claim.

## Claims 41-44 and 46

#### Claims 41-44 and 46 include the limitations:

further including selecting among a plurality of available approaches to calculating the presentation quantity, wherein the approach selected uses an average presentation quantity for the location during the predetermined selling period.

further including selecting among a plurality of available approaches to calculating the presentation quantity, wherein the approach selected uses a presentation quantity for the selling location on the **first day of the predetermined selling period**.

further including selecting among a plurality of available approaches to calculating the presentation quantity, wherein the approach selected uses a presentation quantity on **the day** of the predetermined selling period **when the item is received** at the selling location.

further including selecting among a plurality of available approaches to calculating the presentation quantity, wherein the approach selected uses a **largest presentation quantity** associated with the item at the selling location **for any day of the predetermined selling period**.

wherein the presentation quantity used is the presentation quantity for the selling location on the **last day of the predetermined selling period**.

These limitations are not found in Landvater in view of the RDG ad.

The only part of Landvater that discusses figuring presentation quantities into order generation is cols. 14-15. The other passages that the Examiner cites are wholly irrelevant to the level of detail presented by these claims.

Landvater does not use any of these approaches.

Per claim 41, no average is calculated or used. When the so-called "safety stock" changes due to a shelf change, Landvater substitutes the new threshold for the old, regardless of whether it goes up or down.

Per claim 42, the presentation quantity on the first day of the selling period is replaced by a quantity for a later day, if the quantity changes. There is no sense in which the first day quantity is preferred over the quantity on any other day.

Per claim 43, the quantity used is a quantity on the day when fractional unit sales threaten to reduce the inventory on hand below a threshold for generating an order. Landvater does not teach resetting the quantity again to the day on which goods will be received at the selling location.

Per claim 44, no maximum is calculated or used. When the so-called "safety stock" changes due to a shelf change, Landvater substitutes the new threshold for the old, regardless of whether it goes up or down.

Per claim 46, the presentation quantity on every day before the last day of the selling period is used by Landvater. The first day quantity is replaced by a quantity for a later day, if the quantity changes. There is no sense in which the last day quantity is preferred over the quantities on earlier days.

Therefore, claims 41-44 and 46 should be allowable over Landvater in view of the RDG ad.

#### Claim 45

#### Claim 45 includes the limitations:

wherein the simulating includes selecting the larger of the presentation quantities or the projected demand requirements for the item at the selling locations.

These limitations are not found in Landvater in view of the RDG ad.

Landvater always uses both the presentation quantity (as a threshold) and the projected demand (to reduce the quantity on hand.) There is no suggestion in cols. 14-15 of selecting between the two.

Therefore, claim 45 should be allowable over Landvater in view of the RDG ad.

Applicants respectfully submit that claims 25-46 and 93 should be allowable over Landvater in view of the RDG ad.

## **CONCLUSION**

Applicants respectfully submit that the pending claims are now in condition for allowance and thereby solicit acceptance of the claims as now stated.

Applicants would welcome an interview, if the Examiner is so inclined. The undersigned can ordinarily be reached at his office at (650) 712-0340 from 8:30 a.m. to 5:30 p.m. PST, Monday through Friday, and can be reached at his cell phone at (415) 902-6112 most other times.

**Fee Authorization.** The Commissioner is hereby authorized to charge underpayment of any additional fees or credit any overpayment associated with this communication to Deposit Account No. 50-0869 (BLFR 1001-1).

Respectfully submitted,

Dated: August 6, 2007 /Ernest J. Beffel, Jr./

Ernest J. Beffel, Jr. Registration No. 43,489

Haynes Beffel & Wolfeld LLP P.O. Box 366 Half Moon Bay, CA 94019

Telephone: (650) 712-0340 Facsimile: (650) 712-0263